



Business Communications Manager 2.5 Feature Pack 1 Update

**Real World
Real Value
The Real Solution**

Voice Over IP eSeminar

Agenda

- **BCM Product Overview**
- **Solutions Profiles**
- **Why BCM?**
- **Why Nortel Networks?**



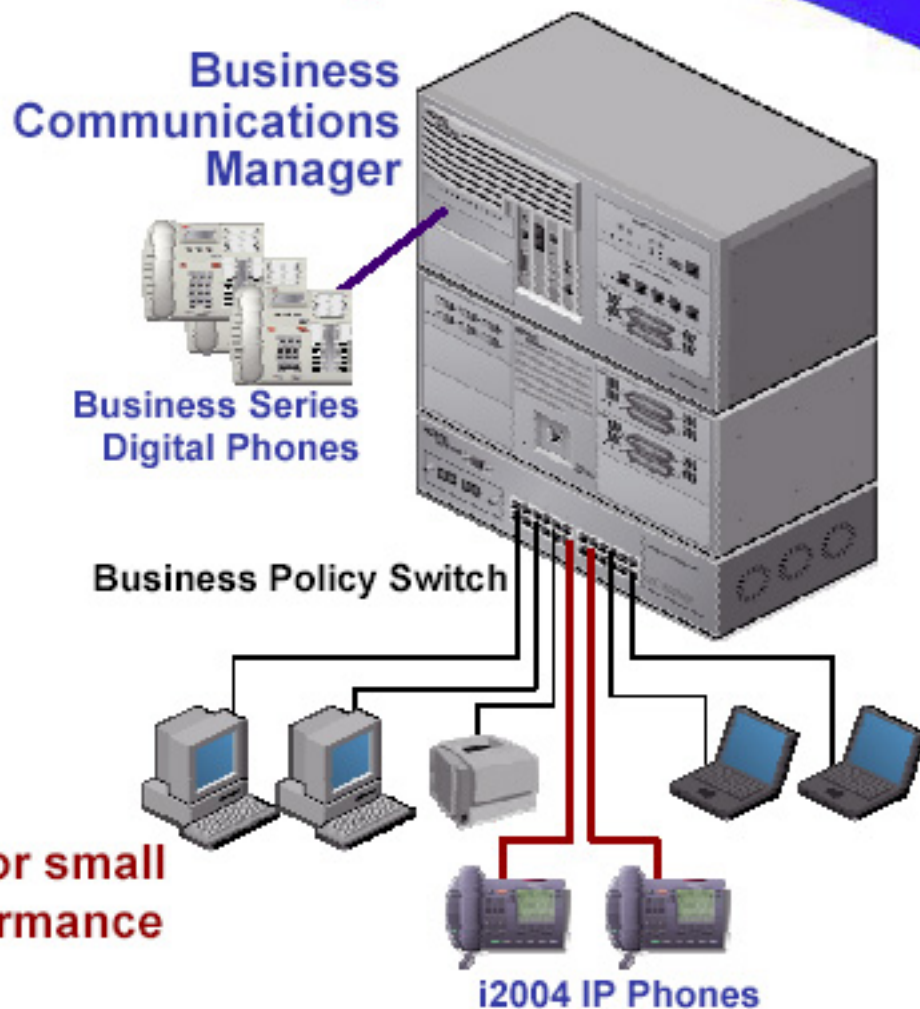
Business Communications Manager 2.5 Feature Pack 1

Product Overview

Business Communications Manager

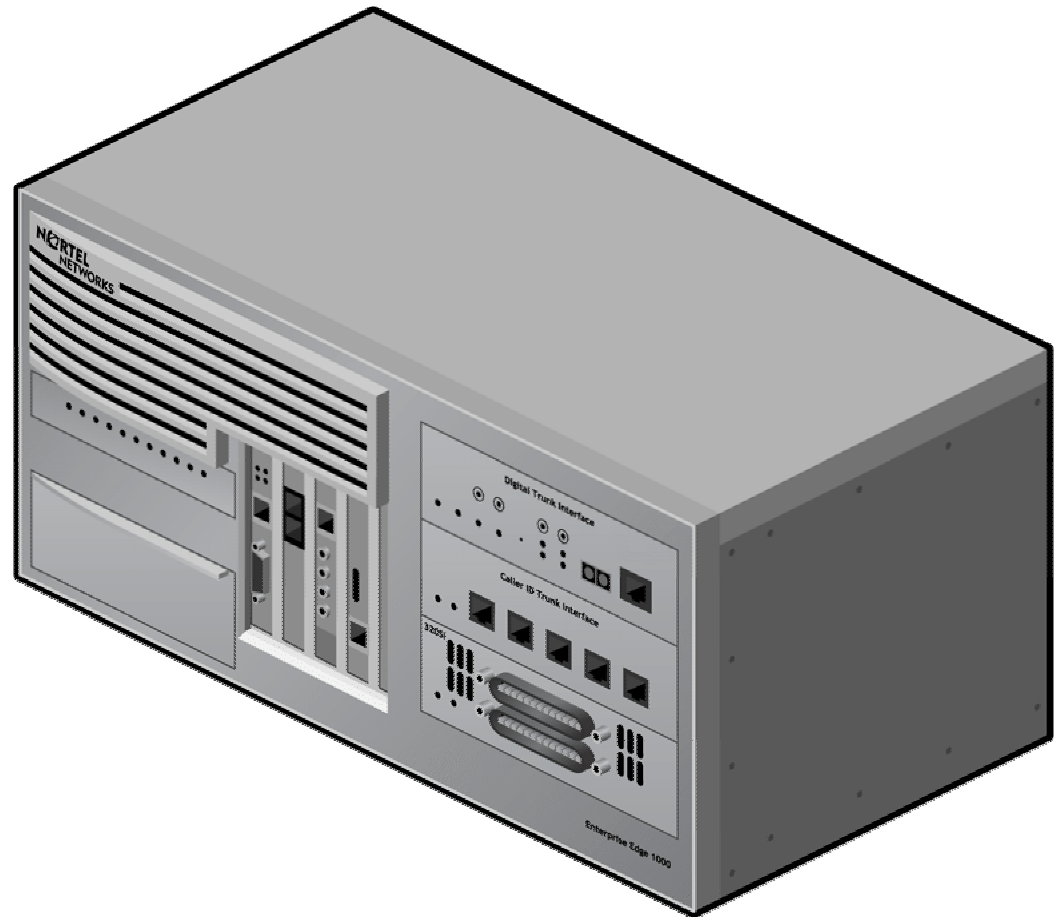
- Provides choice for the small business and branch office site:
 - Advanced IP Telephony
 - Traditional telephone communications
- Seamless integration with Business Policy Switch
 - Prioritizes voice and data traffic
 - Ensures mission-critical quality
- Scalable, highly flexible and feature rich
 - Growth capacity from 80 to 120 stations

Total Internet Telephony Solution for small sites based on common High Performance Network Architecture

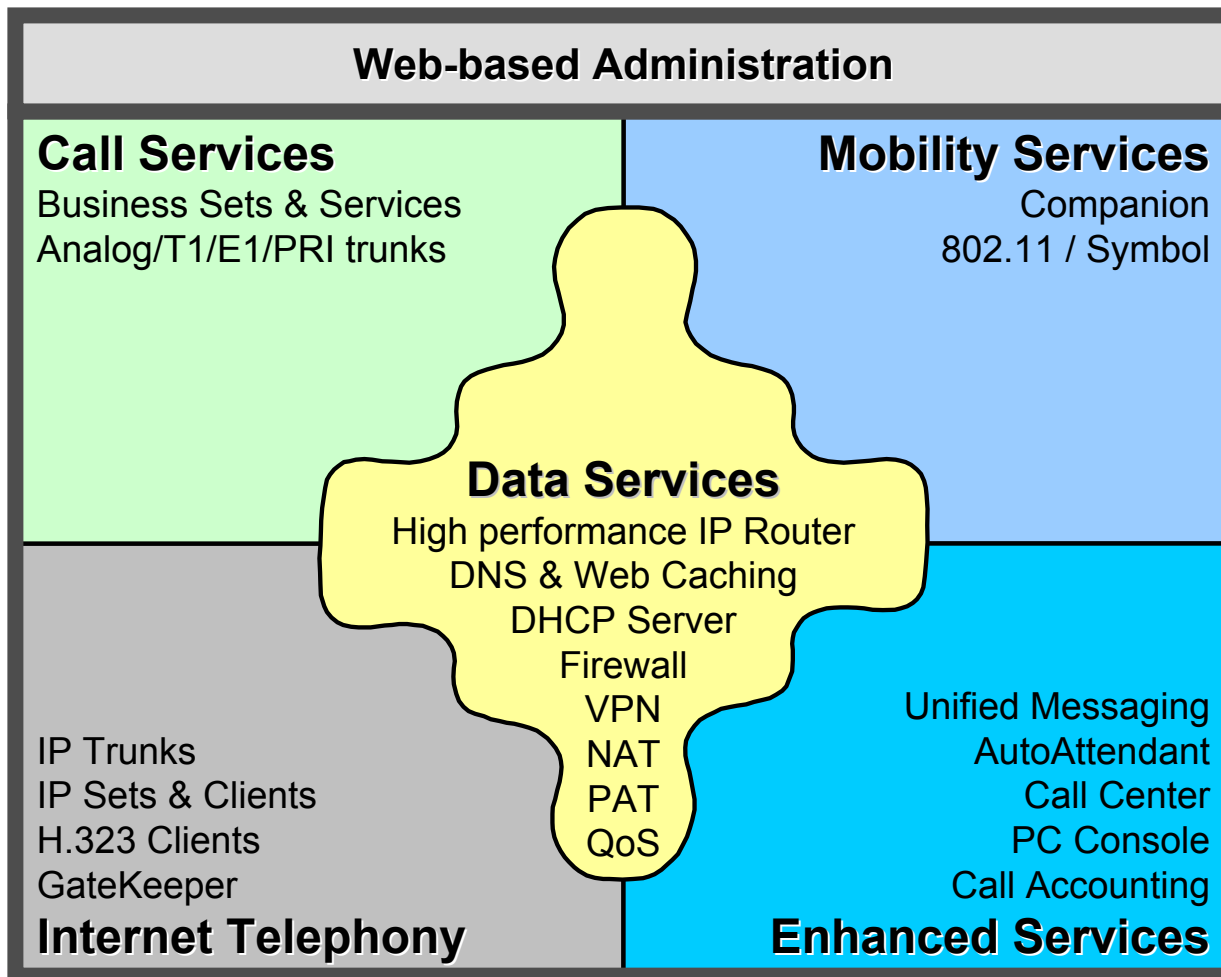


Business Communications Manager

- Converged voice and data solutions
- Cost effective
- Simple to manage
- Highly flexible and feature rich
- Secure
- Scalable
- Highly Reliable



BCM Building Blocks & System Integration

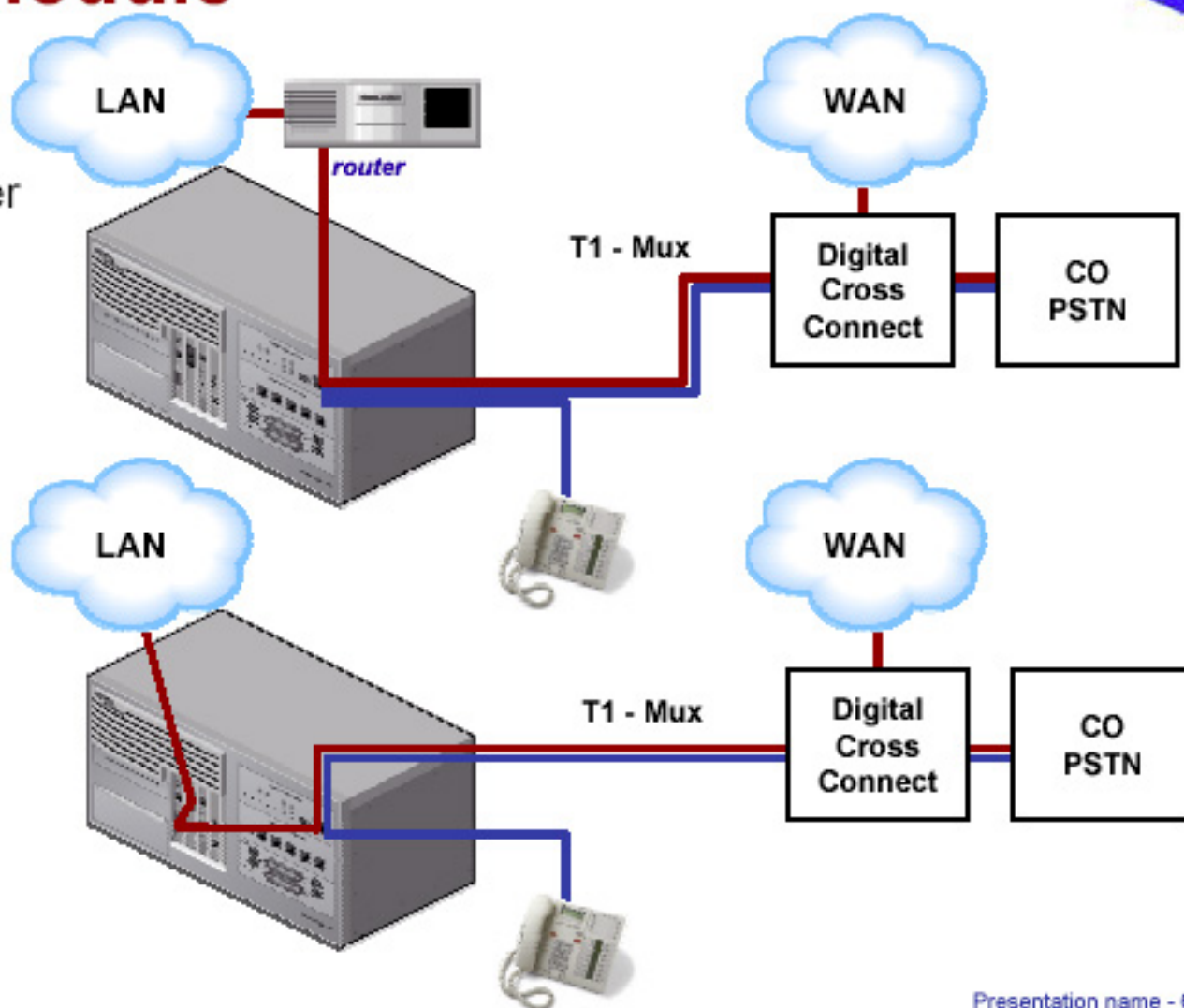


NEW

T1-V.35 Drop and Insert Mux (DDIM) Media Bay Module

— Data
— Voice

- **Single box-solution**
 - Removes need for separate multiplexer
- **Two Configurations**
 - Existing external router
 - Current BCM WAN card



i2002 Internet Telephone

- **Similar to the i2004, but**
 - Smaller footprint,
 - Reduced price
 - Fixed angle stand
 - 4 line keys, instead of 6
 - 1 line display area
- **Built in 3 port Switch**
 - No Plug-in accessory port
 - Designed to 802.3af LAN power standards



802.11 Voice over Wireless IP (VoWIP)

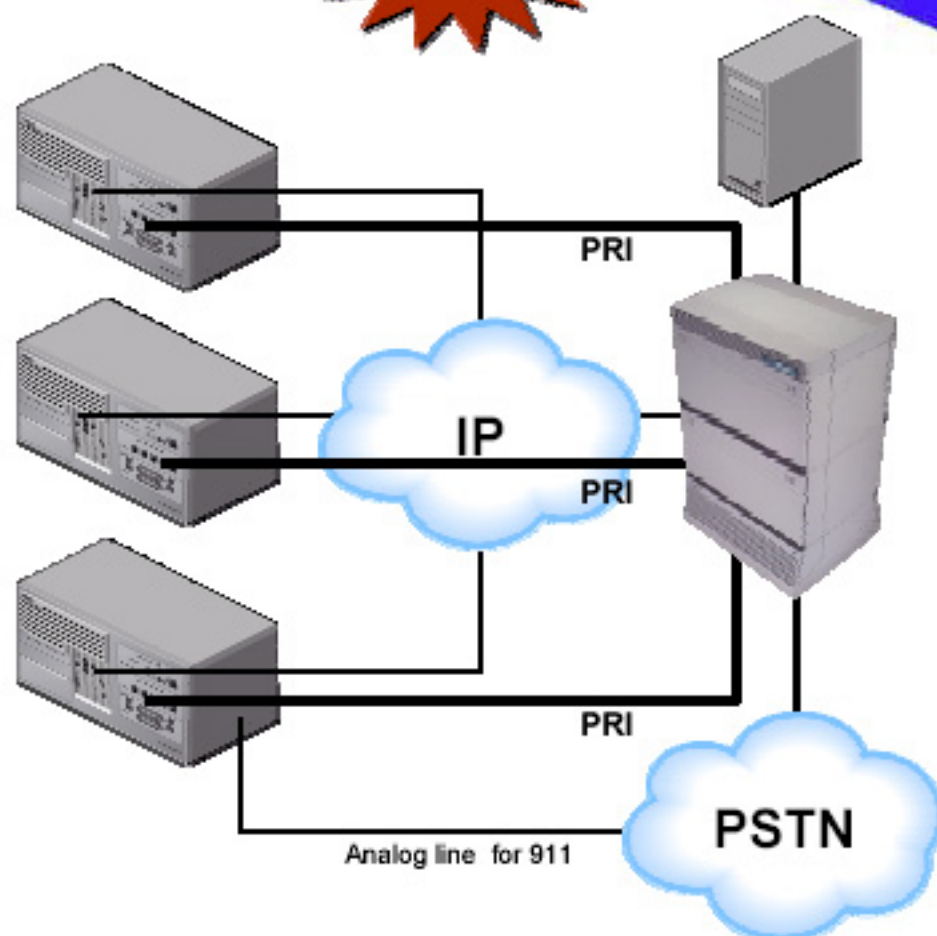
NEW

- Enhances user mobility with exceptional standards based voice quality
- Enables voice on 802.11 wireless ethernet LAN networks
- Components include:
 - Wireless LAN VoWIP Telephony Devices
 - 802.11 Phones or voice enabled PDAs
 - Wireless LAN
 - 802.11b Access Points

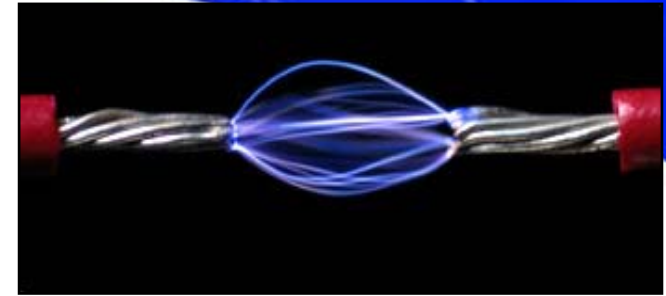


Networking with Meridian 1 **NEW** Over PRI or IP

- **Centralized Voice Mail**
 - Call Pilot or Meridian Mail
 - Single voice mail system to administer
- **Consolidated trunking**
 - Reduce trunking at remote sites
 - Retain line at remote for 911
- **Centralized Attendant**
 - Eliminate attendants at remote sites



Integrated High-Performance IP Router

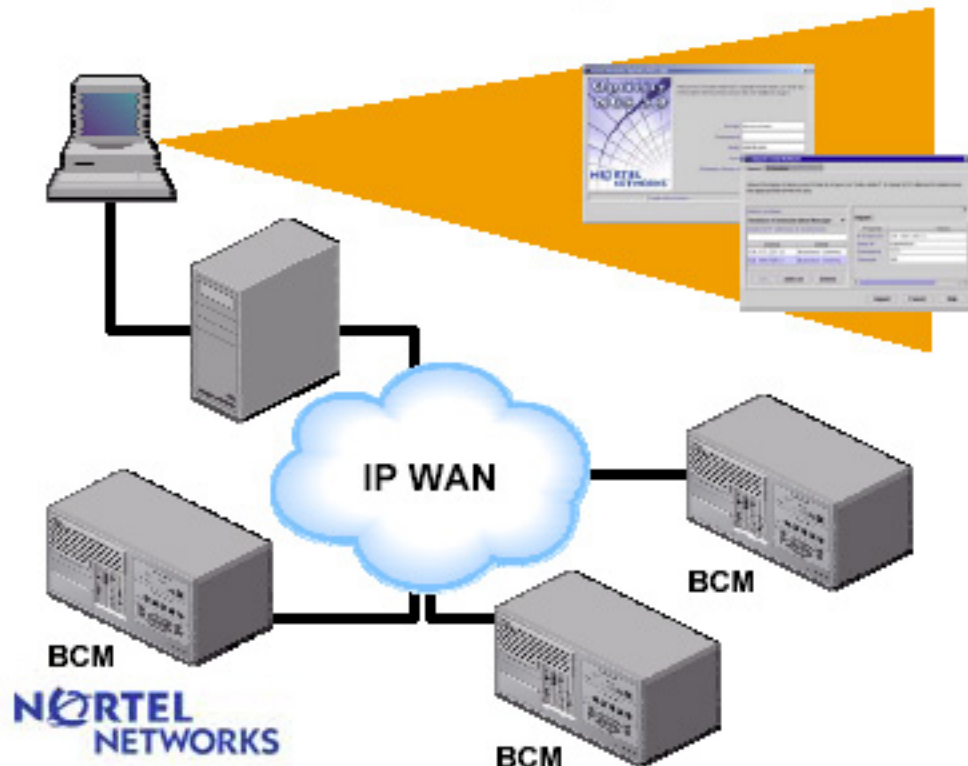


- **Basics**
 - Static Routing
 - RIP and RIP 2
 - OSPF
- **Virtual Private Network (VPN)**
 - PPTP
 - IPSec
 - Device Authentication
 - Server to server tunneling
 - ✓ BCM to BCM
 - ✓ BCM to Contivity Server
 - Split tunneling for Internet access
- **Policy**
 - COPS-PR: interoperability with Optivity Policy Server Version 2
 - UI consistent with Optivity and Business Policy Switch
- **Multiple IP Addresses** 
 - Multiple addresses on LAN/ WAN interfaces with QoS
- **Point To Point Over Ethernet (PPPoE)** 
 - The ability to extend xDSL service to a modem utilizing BCM LAN/LAN configuration

Multi-site Management NCM (Network Configuration Manager) for BCM

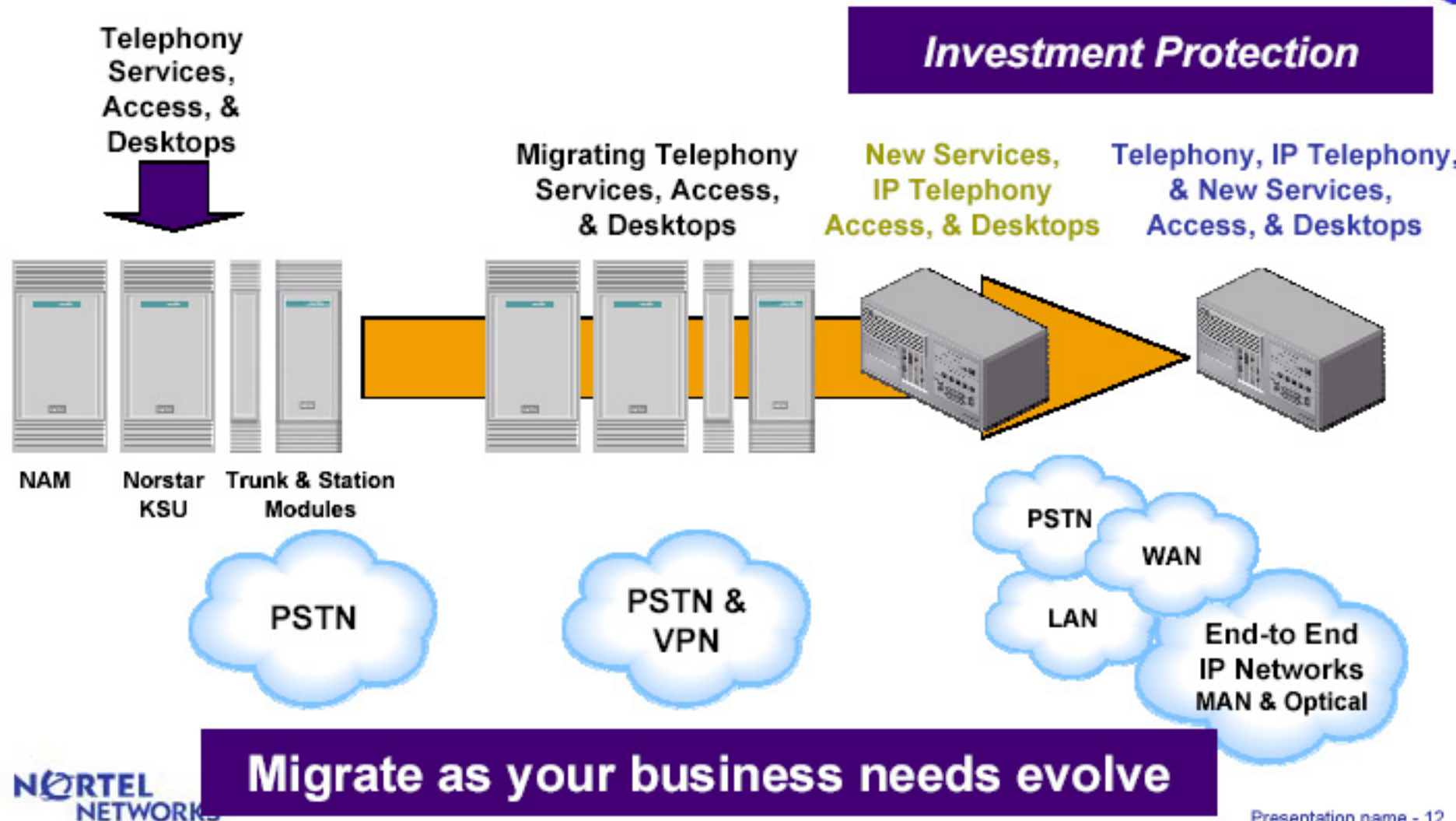


- Single view of the network with network-wide capability for BCM
- Common database for storing and managing BCM system, inventory and configuration information and a launch point BCM element and tel set programming tools



- One View, One Database, One Solution
 - Client / Server application
 - Administration / Security –audit log
 - Database management – sorting / searching
 - Configuration file management / archiving
 - Configuration compare
 - Scheduling
 - email notification
 - Multi-user environment
 - Win NT, Win 2000, Solaris – server

Upgrading Norstar to BCM



Business Communications Manager

Complete VoIP solution for small sites

Web-based Management

Local / remote management, backup and restore
View / change configuration settings for all services
Perform software key-code activation
Administration and Diagnostics

WAN

High performance IP Router
VoIP QoS
DNS & Web Caching
DHCP Server
Firewall / VPN
NAT / PAT

WAN Data

PSTN

BCM

Applications

Unified Messaging

Attendant Console

Multimedia Call Center

LAN

BPS

TDM
Terminals

IP
Terminals
and Clients

Terminals and Clients



BCM Solutions Profiles

Solution Scenario #1: SMB Multisite

Background:

- ProCo - structural engineering firm
- Headquartered in Minneapolis, with branch offices in New York, Atlanta, Dallas, and San Francisco.
- The headquarters has 50 employees and each branch has an average of 20 employees.
- Requires a highly interactive environment across sites including frequent voice and file transfer traffic between sites.

Problem:

- ProCo is the amalgamation of 5 separate engineering firms
- Different voice and data communications equipment at each location.
- No networking, no telecommuter, road warrior support capabilities.
- Choice must continue to meet their needs if they continue to expand.

Solution Scenario #1: SMB Multisite

The Options:

- A traditional telephony solution, or
- Nortel's Business Communications Manager Voice over IP solution.
- Business Case Assumptions:
 - MAC: 120 employees X 50% activity X \$150 per move = \$9,000
 - Converged Support: Due to ProCo's widely dispersed operations they felt that they would only enjoy a 25% reduction in support = \$25,000
 - TDM Wiring: 120 employees X 50% activity X 25% of MAC requiring new wire run X \$225 per run = \$3,375
 - Bandwidth efficiency: ProCo were uncertain about how much more efficient their network would become so they assumed a conservative 5%. 120 employees X \$1,200 network cost per employee X 5% = \$7,200
 - ProCo has mostly enclosed offices and so dropped the Instant Move savings from their calculation.

Solution Scenario #1: SMB Multisite

Business Case Calculation:	Business Communications Manager / BPS	Traditional Telephony Solution
Total Capital cost of Solution	\$137,000	\$82,000
Annualized MAC Savings	(\$9,000)	
Annualized Converged Support Savings	(\$25,000)	
Annualized TDM wiring savings (existing sites)	(\$3,375)	
Bandwidth Efficiency Savings	(\$7,200)	
Net Year One Cost	\$92,425	\$82,000
Recurring Annual Savings	\$44,000	\$0
Payback	1.25 years	

The Conclusion: The incremental cost of the Voice over IP solution pays back in 1.25 years.

Solution Scenario #2: The Multi Branch Enterprise

- **Background:**

- First Interstate Bank, financial institution headquarter in Chicago, branch network across the northeast.
- They have 600 employees at the head office, 30 branches with 25 employees per branch.
- Almost half of these branches have recently come from acquisition of a smaller competitor.

- **Problem:**

- First Interstate is looking for cost effective ways to expand their market coverage.
- Adding banking kiosks to 15 grocery locations.
- Need a solution that will bring their 15 new branches “into the fold” and build out new kiosk locations.
- Also looking for ways to keep costs under control.

Solution Scenario #2: The Multi Branch Enterprise

- **The Solution:**

- Communications network is a critical part of their ability to survive.
- The kiosk and branch locations require the benefits of centralized management and a unified network
- After reviewing a number of alternatives, the bank decides to implement an IP Telephony solution from Nortel Networks.

- **The Plan:**

- Leverage existing Meridian 1, Option 61C at the head office by adding IP enabling ITG cards .
- Standardize on the Meridian 9150 for their kiosk locations,
- Deploy new Business Communications Managers for each branch.
- Full deployment is expected to take 12 months.

Solution Scenario #2: The Multi Branch Enterprise

- **Business Case Assumptions:**

- MAC: $730 \text{ stations} \times 50\% \text{ activity} \times \$150 \text{ per move} = \$56,250$
- Converged Support: First Interstate plans to downsize their network support staff from 17 to 10 saving \$700,000 annually.
- TDM Wiring:
 - Kiosk and new branch wiring run savings: $435 \text{ Runs} \times \$225 \text{ per run} = \$97,875$.
 - Existing runs: $1410 \text{ employees} \times 50\% \text{ activity} \times 25\% \text{ of MAC requiring new wire run} \times \$225 \text{ per run} = \$27,422$
- Bandwidth efficiency: First Interstate is confident that their network resource costs can be reduced by a minimum of 15% per employee. $730 \text{ employees} \times \$1,200 \text{ network cost per employee} \times 15\% = \$253,800$
- Travel expenses for the 17 person network support department are \$96,000 annually. With an IP Telephony solution, First Interstate believes they can reduce this figure by 75%. $\$96,000 \times 75\% = \$72,000$.

Solution Scenario #2: The Multi Branch Enterprise

Business Case Calculation:	The Nortel Solution
Total Capital cost of Solution	\$1,102,300
Annualized MAC Savings	(\$56,250)
Annualized Converged Support Savings	(\$700,000)
Annualized TDM wiring savings (existing sites)	(\$125,297)
Bandwidth Efficiency Savings	(\$253,800)
Travel Savings	(\$72,000)
Net Year One Cost	1,518,800
Recurring Annual Savings	1,207,347
Payback	.8 years

The Conclusion: With the implementation of IP Telephony, First Interstate's capital costs will be realized in 9 months with continued savings of over \$1 million per year.

Nortel Networks Voice over IP Portfolio: You Choose the Solution!

Broad Range of Customer Needs, Differing Rates of Adoption

Portfolio	Digital Telephony	IP Infrastructure	IP-Enabled	IP Solutions
	Norstar  Meridian 1/ SL-100 	Business Policy Switch  Passport / Contivity 	Business Comm. Mgr.  Meridian Gateways 	Business Series   Succession CSE1K 
	Voice/Data and IP-Enabled Terminals and Peripherals			
	• Single Site • SMB-Enterprise • Stand-alone Voice Solution Telephony Only	• Single & Multi-site • LAN & WAN • Internet Access Voice & Data	• Single & Multi-site • LAN & WAN • Voice & Data Hybrid Solution Circuit & IP Services	• Single Site • Multi-Site • Branch Office End-to-end, Total IP Voice & Data
	Advanced Applications • Contact Centers • CTI • Mobility • Wireless Internet • eBusiness			



Why BCM?
Why Nortel Networks?

Americana Community Bank



- **The Challenge**

- Deliver advanced telephony features, file sharing, e-mail and voice mail
- Improve customer service, operating efficiencies and cost savings

- **The Solution**

- Business Communications Manager
 - Offered a 20% costs savings over new PBXs and data equipment
 - Enabled significant cost savings from a converged platform with a payback of less than 2 years!



Americana Community Bank



- **The Customer's View**



“We didn’t simply want to add pieces to a puzzle; we wanted to build a wide area network that would deliver features and services to improve how we do business internally, and with our customers.”

Sheila Christiansen, Technology Manager
Americana Bank

But Don't Just Take Our Word For It...

“Nortel Networks is in a unique position within this marketplace, with its long heritage of voice expertise, and bolstered by its acquisition of Bay Networks’ data expertise....”

“Its offerings of evolutionary and revolutionary product solutions gives Nortel blanket coverage....”

“Nortel will capitalize on its leadership as the marketplace moves further along with voice/data convergence, addressing the concerns of all types of organizations.”

Gartner February 22, 2001

CommWeb (CT Labs)

What are the industry experts saying?

“We found the BCM product to have an almost overwhelming number of PBX, voicemail, unified messaging and auto attendant features. Nortel has done an excellent job of carrying forward their legacy PBX product experience and expertise into the Next Gen realm. Again, the BCM is now officially the king of low-end Next Gen Business Phone System hill. “

“The BCM is the most feature-rich Next Gen PBX that we have tested to date”

/

CommWeb March 2002

<http://www.cconvergence.com/article>

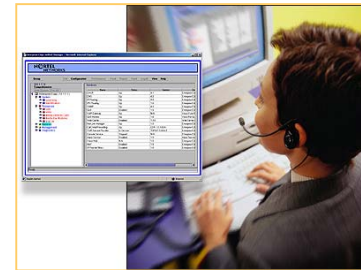
Nortel's VoIP Solutions for Your Business Success

- **Advanced multimedia applications enable new service options and drive revenue!**

- Multimedia contact centers
- Unified messaging
- eBusiness applications
- CRM tools
- Mobility

- **Cost savings for a networked world**

- Converged, simplified network
- Centralized management
- Plug and play capabilities



- **Convergence at your pace**

- Evolution or revolution
- IP / TDM mix and match

- **Full solutions provider**

- Unparalleled breadth and depth of applications
- From the smallest to the largest organization

Partner With a Global Leader

- **#1 leader in Voice over Data**
 - 50% of all VoD calls in 2000 were made on Nortel Networks equipment
- **#1 in VoIP, VoATM, VoFR**
- **#1 in US Q1-Q3 2001 (less than 100 stations)**
 - BCM leading converged solution for the small site
 - #1 Leader in Circuit Switch Voice
 - Norstar Key Systems for small and branch offices
 - Meridian PBX for mid-large enterprises



Partner With a Global Leader

- **#1 Leader in voice applications**
 - Symposium Call Center (ACD, IV, Web Response)
 - Call Pilot Voice Processing & Messaging products
 - Customer Relationship Management
 - OpenSpeech for scalable speech recognition



VoIP Leadership

- Global IP Telephony – Q2
- IS IP Enabled – Q1 & Q2
- Converged – Q1-Q3

Nortel Networks Outpacing Market Growth



Thank You!